





Industry Series

1977 CENSUS OF CONSTRUCTION INDUSTRIES

CC77-I-3(P)

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Preliminary Report

Operative Builders

SIC 1531

During 1977, the establishments with payroll in this industry had business receipts of \$21.4 billion. Of this amount, \$18.9 billion were receipts for construction work. Their payments for construction work subcontracted to others amounted to \$8.2 billion leaving net construction receipts of about \$10.7 billion. Total average employment in the industry was 173.7 thousand employees. Payroll for 1977 amounted to \$2.0 billion. Value added was \$5.1 billion.

The Operative Builders industry includes establishments primarily engaged in construction of single-family houses and other buildings for sale on their own account rather than as contractors. This industry includes speculative builders and condominium developers. For a more detailed description, see the 1972 SIC Manual.¹

For this census, a "construction establishment" was defined as a relatively permanent office or other place of business at which or from which the usual business activities related to construction were conducted. A separate census report was required from each establishment but not from each construction site. Instead, the data for work at each site were included in the report from the appropriate office or branch office. Foreign construction activities were not included in this census.

The 1977 Census of Construction Industries is the sixth census of construction establishments in the United States. As in previous years, it was conducted jointly with the censuses of mineral industries, manufactures, retail trade, wholesale trade, and service industries under authority of title 13 of the United States Code. Although the first construction census was conducted covering 1929, only the data from the censuses of 1967 and 1972 are comparable with the 1977 data.

The 1977 estimates for establishments with payroll in all of the construction industries are based on reports from a probability sample of approximately 181,000 establishments selected from about 536,000 construction establishments with payroll. The sample included all construction establishments with a payroll equivalent of 15 or more full-time employees and

a sample of those with fewer employees. There were two exceptions: In SIC 1521, sampling was employed in establishments with less than 20 employees because of the large number of establishments in that industry; in SIC 1795, all known establishments were included because of the very small number of establishments in that industry. The data obtained from the sample were inflated to represent all construction establishments with payroll. Complete descriptions of the sampling and estimating procedures will be included in the final reports.

Since the data in this report are based on a sample, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same schedules and procedures. The standard error shown in the tables is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population was surveyed. As calculated for this report, the standard error partially incorporates the effect of random errors of response, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference is less than twice the standard error.

This report does not include figures for separate administrative offices, warehouses, garages, or other auxiliary units which service construction establishments of the same company. Data for separate central administrative offices and auxiliaries are collected in the enterprise statistics survey, a part of the economic censuses.

This report is one in a series presenting preliminary data collected in the 1977 Census of Construction Industries. The universe for this census included all establishments classified in

¹ Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 4101-0066. Price \$6.75. 1977 Supplement. Stock No. 003-005-00176-0. Price 90 cents.



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Table 2. Construction Receipts for Establishments With Payroll by Type of Construction: 1977 and 1972

(Thousands of dollars. Detailed figures may not add to totals because of rounding. For meaning of abbreviations and symbols, see text)

Item	Operative builders 1531		Standard error of estimate (percent)	
	1977	1972	1977	1972
Construction receipts.....	18,856,791		1	
Building construction.....	18,756,014		1	
Single-family houses.....	17,195,894		1	
Apartment buildings.....	1,075,074		2	
Other residential buildings.....	31,599		15	
Industrial buildings and warehouses.....	192,911		1	
Office and bank buildings.....	104,281		3	
Stores, restaurants, public garages, and automobile service stations....	91,025		8	
Other nonresidential buildings.....	65,231		4	
Nonbuilding construction.....	75,279		6	
Construction work not specified by kind.....	25,516		7	

Note: See text for explanation of duplication.

¹In 1972, data for this industry were published in combination with data for SIC 1521.

the construction industries (SIC's 15, 16, 17, and 6552). This report will be superseded by a more detailed final report. In addition to data for establishments with payroll presented here, the final Industry Summary report and the reports in the Geographic Area Series will present limited data for construction establishments with no payroll during 1977.

The totals of construction receipts reported by all construction establishments in each of the several industry, State, or other groupings in this census contain varying amounts of duplication, since the construction work (and the receipts) of one firm may be subcontracted out to other construction firms and, therefore, will be included in the subcontractor's receipts. To avoid this duplication, a "net construction receipts" figure has been derived by subtracting the payments made for construction work subcontracted to others from the construction receipts.

Usually, "value added" is the best measure for comparing the relative economic importance of industries or areas. It eliminates the duplication in receipts because of subcontracting. It also eliminates from the output measure the cost of materials, which differs in relative importance among areas and industries.

For this census, "value added" is equal to all business receipts less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for industries for which land receipts are significant, "value added" is equal to all business receipts less land receipts, payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels.

The symbols in the tables mean:

- Represents zero.
- D Withheld to avoid disclosing figures for individual companies; figures are included in higher level totals.
- S Withheld because estimates did not meet publication standards on the basis of either the associated standard error or a consistency review.
- Z Standard error of estimate is greater than zero but less than 1 percent.
- a Sampling error is greater than 40 percent.
- NA Not available; data were not collected.

Table 1. Detailed Statistics for Establishments With Payroll: 1977, 1972, and 1967

(Thousands of dollars. Detailed figures may not add to totals because of rounding. For meaning of abbreviations and symbols, see text)

Item	Operative builders (1531)			Standard error of estimate (percent)		
	1977	1972	1967	1977	1972	1967
Number of establishments.....	21,888		13,237	2		3
Proprietors and working partners.....	9,763		5,700	4		4
All employees:						
March.....	154,991		64,945	1		2
May.....	179,322		71,019	1		2
August.....	184,135		77,952	1		2
November.....	175,743		71,823	1		2
Average.....	173,652		72,305	1		2
Construction workers:						
March.....	103,686		42,392	1		2
May.....	121,569		47,981	1		3
August.....	128,302		54,312	1		2
November.....	119,452		48,416	1		2
Average.....	118,344		48,945	1		2
Other employees:						
March.....	51,306		22,545	1		2
May.....	57,754		23,070	1		2
August.....	55,833		23,733	1		2
November.....	56,291		23,479	1		2
Average.....	55,347		23,517	1		2
Payroll, all employees.....	1,969,673		465,235	1		2
Payroll, construction workers.....	1,118,208		275,517	1		2
Payroll, other employees.....	851,465		190,146	1		2
First quarter payroll, all employees.....	406,056		(NA)	1		(NA)
Employer costs for fringe benefits.....	312,681		(NA)	1		(NA)
Legally required expenditures.....	205,016		(NA)	1		(NA)
Voluntary expenditures.....	107,665		(NA)	1		(NA)
All business receipts.....						
Total construction receipts.....	21,395,693		4,769,190	1		2
Receipts for work subcontracted in from others.....	18,856,791		4,174,325	1		2
Other business receipts.....	184,246		32,579	4		13
Land receipts.....	381,218		116,391	2		3
2,157,684			480,555	1		3
Net construction receipts.....	10,689,360		2,219,617	1		2
Value added.....	5,088,097		1,210,881	1		(1)
Selected payments.....						
Materials, components, and supplies.....	14,149,912		3,078,160	1		2
Construction work subcontracted to others.....	5,758,224		21,124,030	1		2
Selected power, fuels, and lubricants..	8,167,432		1,954,859	1		3
Electricity.....	224,257		(NA)	2		(NA)
Natural gas.....	58,211		(NA)	2		(NA)
Gasoline and diesel fuel.....	21,334		(NA)	2		(NA)
Lubricating oils and greases.....	101,660		(NA)	2		(NA)
Other.....	32,960		(NA)	2		(NA)
10,099			(NA)	2		(NA)
Rental payments for machinery, equipment, and structures.....	62,344		(NA)	2		(NA)
For machinery and equipment.....	37,772		8,943	2		7
For structures.....	24,573		(NA)	2		(NA)
Selected purchased services.....	182,268		(NA)	2		(NA)
Communication.....	69,843		(NA)	2		(NA)
Repairs to structures and related facilities.....	25,102		(NA)	2		(NA)
Repairs to machinery and equipment.....	87,324		(NA)	2		(NA)
Capital expenditures.....	661,314		76,378	4		4
New.....	607,661		56,572	4		6
Structures and related facilities.....	461,896		38,796	5		8
Machinery and equipment, including automobiles and trucks.....	145,765		17,776	2		1
Automobiles and trucks intended primarily for highway use.....	79,348		(NA)	4		(NA)
Used.....	53,654		19,806	4		3
Structures and related facilities.....	24,037		16,700	5		3
Machinery and equipment, including automobiles and trucks.....	29,617		3,106	5		11
Fixed assets and depreciation:						
Gross book value of depreciable assets at end of year.....	2,499,705		(NA)	3		(NA)
Accumulated depreciation at end of year.....	653,609		(NA)	2		(NA)
Net value of depreciable assets at end of year.....	1,846,096		(NA)	3		(NA)
Depreciation charges during year.....	175,100		(NA)	2		(NA)
Structures, additions, and related facilities:						
Gross book value of depreciable assets at end of year.....	1,699,165		(NA)	4		(NA)
Accumulated depreciation at end of year.....	334,471		(NA)	3		(NA)
Net value of depreciable assets at end of year.....	1,364,694		(NA)	4		(NA)
Depreciation charges during year.....	74,806		(NA)	3		(NA)
Machinery and equipment:						
Gross book value of depreciable assets at end of year.....	800,541		(NA)	1		(NA)
Accumulated depreciation at end of year.....	319,138		(NA)	2		(NA)
Net value of depreciable assets at end of year.....	481,403		(NA)	1		(NA)
Depreciation charges during year.....	100,294		(NA)	1		(NA)

¹ In 1972, data for this industry were published in combination with data for SIC 1521.² Includes data for power, fuels, and lubricants, now shown separately.

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